REMARKS

Applicants hereby submit that the enclosures fulfill the requirements under 37 C.F.R. §1.821-1.825. The amendments in the specification merely insert the paper copy of the Sequence Listing and sequence identifiers in the specification. No new matter has been added.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment.

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: October 10, 2001

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"Version With Markings to Show Changes Made"

In the specification:

Paragraph beginning at page 3, line 26, has been amended as follows:

Examples of inhibitors of telomerase include a class of quinone antibiotics, rubromycins and purpuromycins and their analogs (Ueno et al. *Biochemistry* 39: 5995-6002, 2000); 3'-deoxy-2:3'-didehydrothymidine, dideoxyinosine (Beltz et al. *Anticancer Res.* 19: 3205-3211, 1999); the oligonucleotide sequence that mimics telomeric DNA $(TTAGGG)^3$ (SEQ ID NO:1) (Glukhov et al. *Biochem. Biophys Res. Comm.* 248: 368-371, 1998); levofloxacin and ofloxacin (Yamakuchi et al. *Cancer Lett.* 119: 213-219, 1997); carbovir, azidothymidine (AZT) (Yegorov et al. *Biochemistry* 62: 1296-1305, 1997); antisense nucleotides against *c-myc* mRNA including ACGTTGAGGGGCATC (SEQ ID NO:2) (Kohtaro and Takahashi, *Biochem. Biophys. Res. Comm.* 241: 775-781, 1997); isothiazolone derivatives such as 2-[3-(trifluoromethyl)phenyl]isothiazolin-3-one (Hayakawa et al. *Biochemistry* 38: 11501-11507, 1999); ursodeoxycholic acid (Narisawa et al. *J. Exp. Clin. Cancer Res.* 18: 259-266, 1999); diazaphilonic acid (Tabata et al. *J. Antibiot.* 52: 412-414, 1999); the fungal metabolite, alterperylenol (Togashi et al. *Oncol. Res.* 10: 449-453, 1998); regioisomeric difunctionalized amidoanthracene-9,10-diones substituted at the 1,5-, 1,8-, and 2,7-positions (Perry et al. *J. Med. Chem.* 41: 4873-4884, 1998); 5-azacytidine (Kitagawa et al. *Clin. Cancer Res.* **6**: 2868-2875, 2000); 3,4,9,10-perylenetetracarboxylic diimide-based ligands ((Fedoroff et al., *Biochem.* 37: 12367-12374, 1998); 10H-indolo[3,2-b]quinoline (Caprio et al. *Bioorg. Med. Chem. Lett.* 10: 2063-2066, 2000); 2'-*O*-MeRNA telomerase oligomers, 2'-*O*-alkylRNA telomerase oligomers, fomivirsen (Herbert et al. *Proced. Natl. Acad. Sci. USA* 96: 14276-14281, 1999); cationic porphryins (Wheelhouse et al. *J. Am. Chem Soc.* 120: 3261-3262, 1998); diazaphilonic acid (Tabata et al. *J Antibiot.* 52: 412-412, 1999); telomerase inhibitor I (2,6-bis[3-(2-hydroxymethyl)-N-methylpiperidino]propionamido]-anthracene-9,10-dione, diiodide) (Sun et al. *J. Med Chem.* 40: 2113, 1997); telomerase inhibitor II (5'-d(ATGAAAATCAGGGTTAGG)-3';SEQ ID NO:3) (Blasco, M.A., *Science* 269: 1267, 1995); telomerase inhibitor III (5'-d(TTAGGG)-3') (Mata et al., *Toxicol. Appl. Pharmacol.* 144: 189, 1997); telomerase inhibitor

IV (PIPER or N,N'-bis[2-(1-piperidino)ethyl]-3,4,9,10-perylenetetracarboxylic diimide) (Han et al. *Biochemistry* 38: 6981, 1999); telomerase inhibitor V (BSU-1051 or 2,6-bis[3-(N-piperidino)propionamido]anthracene-9,10-dione) (Perry et al. *J. Med Chem.* 41: 3253, 1998); telomerase inhibitor VI (5'-CAGUUAGGGUUAG-3'; SEQ ID NO:4) (Herbert et al. *Proc. Natl. Acad. Sci. USA* 96: 14276, 1999); telomerase inhibitor VII (5'-d(GGG~GGG)-3') (Page et al. *Exp. Cell Res.* 252: 41, 1999); telomerase inhibitor VIII (3,6-bis(3-piperidinopropionamido)-acridine) (Harrison et al. *Bioorg. Med Chem. Lett.* 9: 2463, 1999); and TMPyP4 (meso-5,10,15,20-tetrakis-(N-methyl-4-pyridyl)porphine)(Izbicka et al. *Cancer Res.* 59: 639, 1999). The inhibitor inhibits the catalytic action of telomerase, for example, by acting on telomerase itself or by acting on the substrate targeted by telomerase. A specific chemical name for a substance also encompasses pharmaceutically acceptable salts of the substance.

In the claims:

Claims 12 and 15 have been amended as follows:

12. (Amended) The method of claim 1, wherein said inhibitor is $(TTAGGG)^3$ (SEQ ID NO:1).

15. (Amended) The method of claim 1, wherein said inhibitor is ACGTTGAGGGGCATC (SEQ ID NO:2).

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